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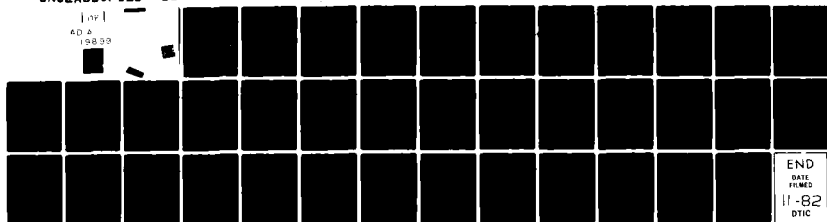
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The Idiographic Study of Leadership
Behavior in Natural Settings: An
Empirical Analysis Using a Single Case
Experimental Design

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This paper first discusses the definitional problem of leadership. A case is made for leadership as a behavioral construct. An idiographic perspective for research is proposed and the results of a single case experimental design are presented.		

We have recently proposed that the field of organizational behavior has generally overlooked an idiographic research perspective (Luthans & Davis, 1981, 1982). The more dominant nomothetic approach is group-centered and depends on standardized, controlled environmental contexts and quantitative methodologies. The idiographic approach, on the other hand, is individual-centered and depends on naturalistic environmental contexts and qualitative as well as quantitative methodologies. The study of leader behavior in natural settings would seem particularly suited to idiographic study.

The study of leadership is currently undergoing serious reappraisal. By most standards, the results of some seventy years of research have been generally disappointing (Stogdill, 1974; Mintzberg, 1982). Arguments have been made for abandoning the use of the leadership concept altogether (Miner, 1975) or finding substitutes for it (Kerr and Jermier, 1978). A great deal of the criticism can be focused on three areas of concern:

1. The failure to define and describe leadership events in ways that can be confirmed in organizations (Argyris, 1976, 1979; Dubin, 1979);
2. The reliance on popular questionnaire instruments to the exclusion of other research methods such as direct observation (Luthans, 1979; Campbell, 1977); and
3. A tendency to ignore influence of the organizational environment on the behavior of both leaders and subordinates (Osborn and Hunt, 1975; Pfeffer, 1977).

While there has been a tendency to acknowledge these points in conceptual writings there has been a frequent tendency to disregard some or all of these issues in the research perspective that is taken.



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The first part of this paper discusses some of the major theoretical issues and problems with the field of leadership. An idiographic perspective is used in suggesting ways to overcome some of the major obstacles to the better understanding and more effective application of the leadership construct. The last part of the paper describes an actual idiographic study made of leader behavior in a natural setting. A single case experimental, design, which was suggested earlier as an effective way to obtain causal implications from an idiographic study (Luthans & Davis, 1981, 1982), is used to make this empirical analysis.

The Definition Problem for Leadership

A major difficulty with the leadership construct is that the term is highly abstract and can be operationalized in many different ways (Barrow, 1978). Most behavioral scientists agree that leadership concerns the exercise of influence but what this influence is, and how it is achieved, is subject to considerable disagreement (Porter, 1977; McCall, 1977). The multiple interpretations of the term have led some researchers to suggest that leadership is a personal attribution that depends on how the researcher or organization member perceives the causes of behavior in a particular situation (Calder, 1977; Mitroff and Pondy, 1978). This view suggests that leadership "has no meaning outside the context--the 'it'--which it is embedded" (McCall and Lombardo, 1978, p. 153).

While one can logically and empirically argue that whether or not leadership has occurred depends on a person's particular interpretation of a situation, it does not necessarily follow from this, that the term

is entirely subjective. Researchers and organization members can reach agreement on whether acts of leadership have taken place. The main issue seems to be whether leadership is only a perceptual phenomenon. Many academicians and practitioners seem to believe that individual leadership can play a crucial role in business and government (Barnard, 1938; Fiedler, 1967; Hollander, 1978; Peters, 1979). Is this an illusion? The current debate has finally come down to whether such a thing as leadership behavior exists as a causal variable in organizations or whether leadership is, as Calder (1977) suggests, a lay fiction that is used to attribute personal cause to behavior.

Perhaps the best position on this issue is that leadership can exist as both an attribution and as a causal behavior variable in organizations. The attributional views of leadership needs no support. Conventional wisdom confirms that leadership exists. However, it is suggested here that three minimal conditions be met to confirm the existence of leadership as a behavioral construct; (1) demonstrated personal causation; (2) observed relationships between behavior and its effects; and (3) substantive performance outcomes.

Demonstrated Personal Causation

Leadership has been described by Pfeffer as "a process of attributing causation to individual social actors" (1977, p. 104). When such an attribution approach is used, leadership is studied by examining how people make inferences and select causal explanations for behavior events (e.g., see Green and Mitchell, 1979). The emphasis is not placed on whether the leader or manager was actually responsible for producing certain outcomes, but whether organization members perceive this person

as being responsible for making these outcomes occur. In this sense, the attributional approach is naive theory of cause (Kelley, 1967).

An alternative way of studying leadership is to use a behavioral approach (Davis and Luthans, 1979). In contrast to an attributional view, a behavioral approach is less concerned with a naive theory of causality than with what actually causes behavior to change. In other words, what aspects of the performance situation are responsible for producing what outcomes. Under this latter view, instead of studying perceived causal relations, the investigator observes the leader's or manager's behavior and its effects on organization members. By systematically varying the leader's behavior, using experimental methods, the researcher can assess whether changes in performance outcomes were brought about by the leader or by environmental influences unrelated to the leader (Komaki, Heinzmann & Lawson, 1980; Kreitner, Reif & Morris, 1977). Although less frequently used, it is contended here that idiographic studies of behavior in natural settings that use single case experimental methods are one of the best means of demonstrating causal relations in organizational behavior research (Komaki, 1977; Luthans & Davis, 1981, 1982).

Instead of offsetting one approach against the other, the currently popular attribution approach (Mitchell, Larson & Green, 1977; Phillips & Lord, 1981) and the less used behavioral approach should both be used to develop more complete understanding of leadership. All research relies on an inference process of relating verbal constructs (such as leadership) to empirical events. Neither the attribution approach nor the behavioral approach is demonstrably superior in defining or describing the leadership metaphor (Pondy, 1978). An attribution

approach is particularly useful for describing events from the organization member's applied logic of cause-effect relations while a behavioral approach is particularly useful for explaining leadership independent of organization members' perceptions of causal relations. A circumstance in which both approaches could profitably be applied is in differentiating those situations where a leader or manager has no effects on behavior (but is attributed as being influential in producing results) from those situations where the leader-manager is responsible for definite organizational effects (but is attributed as having no influence). This is a paradoxical situation that probably occurs quite frequently in modern organizations (Kets de Vries, 1980).

Observed Relationships Between Leader Behavior and Its Effects

Unlike constructs such as motivation or decision making which could conceivably be examined by studying individuals, leadership is a relational and interactive construct in which a manager's leadership capability is not judged by observing his/her behavior in isolation, but instead, by observing the manager's behavior and its effects on other organization members. Most leadership research has either isolated leader behavior from its effects or isolated the effects from the leader behavior (Campbell, Dunnette, Lawler & Weick, 1970). This is mainly due to what Campbell et al. term a bias toward instrument-centered research in which aspects of environments, cognitions, behaviors, and organizational outcomes are studied separately rather than together and interactionally.

Research is needed that describes these variables more fully. The effects the leader has on others are likely to be influenced by the

constraints and opportunities afforded by the organizational environment, the leader's cognitive perceptions of the environment and the performance outcomes to be achieved, as well as the behavioral alternatives the leader is capable of choosing from. These aspects of the situation should not be considered separately. From a social learning theory perspective, they will have a mutually determining influence on leadership. Idiographic studies that can provide a fuller, richer description of the circumstances surrounding the leadership event may be more valuable than those that only provide minimal information about the situation confronting the leader-manager.

Substantive Performance Outcomes

Managers may sometimes be required to simply maintain and make no changes in their subordinate's performance. Leadership, on the other hand, is most convincingly demonstrated when substantive changes are needed in individual or organizational performance. The term "substantive" is used here in preference to the notion of statistical significance. Mintzberg (1982) and others have noted that numerous leadership findings have been reported as statistically significant but have been substantively of little value.

One of the main reasons for this lack of substantive results is the tendency to include all relations between superiors and subordinates in the analysis of leadership. Every nod and eye blink could be considered a leadership variable. When all such interpersonal variables are included, leadership can only be analyzed on a moment by moment basis examining in minute detail a manager's every influence on his/her subordinate. However, Dubin (1979) has argued that the tendency to

treat leadership as the same as interpersonal relations trivializes the construct and tends to make leadership a common everyday occurrence. He contends that acts of leadership worthy of the name occur far less frequently than is generally acknowledged and that it is time we started studying those leadership acts that have resulted in substantive changes in organizational behavior and outcomes.

There seems to be much that can be gained by following Dubin's suggestion to focus on those events that have had measurable changes on productivity or organizational efficiency. Much recent criticism has rested on a view that leadership may simply not be a very important variable and that job design (McCall, 1978) or the effects of the organizational environment (Pfeffer, 1977) may be more influential than leadership. Leadership can become a more credible construct by studying those events in which an individual leader has played some demonstrable role in introducing major changes in behavior.

The Use of Alternative Methods to Questionnaires

A second major issue concerns methodological techniques in the field of leadership. There has been a tendency to use questionnaires to the exclusion of all other data gathering methods in leadership research (Argyris, 1976, 1979; Campbell et al, 1970; Koch and Rhodes, 1979; Luthans, 1979). Campbell (1977) has noted that there is danger of transforming the study of leadership to a study of questionnaire instruments. Argyris (1976, 1979) contends that those questionnaires that attempt to describe the behavioral dimensions of leadership merely tap the phenomenological, attributional aspects of leadership. They do not deal with observable behaviors. Schreisheim and Kerr pointed out

after their extensive examination of the major questionnaires used to study leadership that "the leadership area is today without any instruments of demonstrated validity and reliability" (1977, p. 33). As was pointed out in the introductory comments, the position taken here is that leadership research needs to move beyond field studies using questionnaires or laboratory experiments studying college students using questionnaires. A large number of alternative methods and approaches are available that have the potential for expanding the understanding of leadership.

More idiographic studies incorporating structured or unstructured observation techniques are just beginning to be recognized in leadership research (Bussom, Larson & Vicars, 1982; Stewart, 1982b). Mintzberg's (1973) now classic observational studies of CEO's demonstrates how valuable this approach can be. Large scale laboratory simulation using observational techniques to study the leadership behavior of practicing managers are another underused approach which can produce interesting findings (McCall and Lombardo, 1982).

Besides the commonly used static correlational studies, field experiments which evaluate cause-effect relations between leaders' behavior and subordinates' response also are needed. The applied behavioral designs using reversals and multiple baselines are ideal for this purpose. They do not require multiple comparison groups or elaborate time series designs (Cook and Campbell, 1979) and have been successfully applied in organizational behavior research (Komaki, 1977; Komaki, Waddel & Pearce, 1977; Luthans & Maris, 1979; Luthans & Bond, 1977). They can be used in leadership research.

There seems to be a need to also use multiple data collection techniques (Jick, 1979; Webb & Weick, 1979) to reduce the bias of using a single data source, and "direct" methods over "remote" methods (Mintzberg, 1979). Direct methods bring the investigator into first hand contact with the organizational events being studied and include observations, self-reports, on site interviews, and unobtrusive measures. Remote methods (Ettlie, 1977) make no requirement of the investigator to set foot inside the organization and include questionnaires and telephone interviews.

It is the position taken here that the researcher needs to enter the organization and study actual leadership problems in the natural setting; i.e., in situ. Questionnaires can build in attributed qualities of leaders; they do not allow the investigator to study the interactive nature of leadership. The use of observational techniques and other "direct" methods can provide first hand examples of leadership and improve the understanding of what leadership events really take place.

The Influence of the Organizational Environment

A third major issue in leadership research revolves around the limited attention given to the effects of the organizational environment (Hunt and Osborn, 1982; Olmstead, 1973; Osborn and Hunt, 1975). Pfeffer (1977) and Pfeffer and Salancik (1978) have argued that the external resource environment creates dependencies that can dictate top management decision making to the point that individual leadership may play an inconsequential role. These demands and constraints filter through the organization limiting the amount of choice and initiative at

each level of management. Most leadership research has ignored the controlling influence of the environment on both the behavior of the leader and the leader's subordinates.

The level of personal discretion and potential for exercising leadership is obviously partly dictated by the job and the environmental constraints imposed on the job. Some jobs will offer virtually no latitude for personal initiative while others may offer a great deal. However, the interesting issue from a leadership standpoint is that leaders vary in their ability to operate effectively within these environmental constraints and in their ability to influence the parameters of these constraints (Stewart, 1976, 1977, 1982a). For example, managers occupying the same, or a very similar job, do not perform it the same way. Some managers expand their job and their level of influence while others seem to constrict their job and reduce their level of influence. Managers may be controlled by their work environment but they are also capable of manipulating the environment to their own advantage (McCall, 1977).

Managers seem to particularly manipulate the information environments of meanings and attributions and the structural environment of behaviors and work routines (Weick, 1969). The manipulation of these aspects of the environment to ensure appropriate subordinate performance would seem to be an important component of leadership. From an informational standpoint, the manager must select out the issues to be confronted and how they are to be viewed. From a structural standpoint, the manager must decide what actions are needed and what changes will have to be introduced.

A critical component of this process is making sure both manager and subordinate are kept mutually informed of what each other is thinking and doing without having to be in one another's company all the time. Managers do not want to do their subordinate's job for them and subordinates do not want to have their boss breathing down their neck all the time. Many important leadership initiatives concern setting up systems that insure effective communication and appropriate subordinate behavior without requiring the leader or manager to be present all the time. In other words, the informational or procedural aspects of the job are set up in advance so that the subordinate knows what to do without having to consult continuously with the manager. Dubin (1979) has termed this "leadership at a distance"--a dimension of leadership which he argues has been ignored in favor of the face to face notion of leadership. The position taken here is that setting up systems to insure effective subordinate behavior lies at the heart of the delegation process which somehow has become detached from considerations of leadership. Effective delegation means that control passes from the leader to the subordinate. The leader does not constantly have to watch over and manage the subordinate. The subordinate is able to self-manage the delegated work freeing the leader or manager to take on other responsibilities (Manz and Sims, 1980). The manager's ability to manipulate the performance environment to insure effective subordinate behavior is another aspect of leadership that deserves fuller attention.

Overall, Pfeffer and others who emphasize that the organizational environment is likely to have a pervasive controlling influence on the behavior of both leaders and subordinates seem appropriate, but, from a leadership standpoint, the most interesting issue to study is the

leader's capability to manipulate this environment to produce satisfactory performance outcomes.

A Restatement of the Leadership Problem

In summary, the position taken here is that leadership does exist as a causal variable in organizations. However, there is a need to distinguish between leadership as a phenomenological construct and leadership as a behavioral construct. It is asserted here that in order to define and describe leadership as a behavioral construct, three minimal conditions must be met: (1) demonstrated personal causation; (2) observed relationships between behavior and its effects; and (3) substantive performance outcomes. In addition, the use of observational methods in preference to questionnaires as data gathering techniques is proposed and the use of field experiments using applied behavioral designs in which cause and effect relationships can be demonstrated are suggested. Finally, it has been argued that leadership research needs to be embedded in the context in which it takes place (i.e. the natural setting) and that attention needs to be given to the leader's ability to manipulate the environment which impacts on the work group's performance outcomes. The remainder of the paper describes a leadership study that incorporates many of these considerations.

An Idiographic Study of Leadership

The study of a single production manager was used to demonstrate the idiographic approach to researching leadership in natural settings. This study took place in a small silk screen printing firm located in a midwestern city. The majority of the firm's business

consisted of printing small or large batches of "T" shirts that were distributed throughout the midwest. The production manager felt that a major problem being experienced by this firm was coordinating work through each stage of the production process consisting of art work design, screen preparation, and printing. This production manager (PM) used a set of books--one for Art, Screens, and Print--to keep track of all jobs going through the three departments. Each stage of each job was logged in the appropriate book and assigned to the respective department.

Despite the apparent thoroughness of this approach, observations, interviews and pouring over the records confirmed that errors and omissions frequently occurred and the production system was not keeping pace with the increasing number of sales orders. This method of scheduling jobs made the entire production crew extremely dependent on the PM for all work instructions. Personnel in each department were observed to arrive each day with no clear idea of what was to be done. Frequently, they would stand around waiting for the PM to see each department head with the day's assignment before they could start to work. The PM, in the meantime, was being run off his feet scheduling new orders, checking the progress of existing orders, answering questions that arose at each stage of the production process, and attempting to take care of his other duties. Crisis management was the rule rather than the exception for the PM.

The PM was aware that if he was to decrease the level of personal involvement in all aspects of production and reduce the worker's dependence on him, control of the production process would need to pass from his hands into the hands of specialized departments. In an effort

to relieve some of the pressure he devised and decided to try a new scheduling procedure. He developed a workup sheet shown in Figure 1 that combined all the required information for a single production job on one comprehensive form. Instead of conveying instructions piecemeal as the job progressed through the system, the job instructions and timing deadlines would now be completed at the outset when the order was received from the company sales representative. The form containing all the necessary instructions could then accompany the job through the system. In effect each job could be programmed through the system on the scheduling form.

[Insert Figure 1 About Here]

A number of advantages were expected to be realized from the system. First, the laborious process of logging each order through the set of books could be dispensed with. Second, it was expected that the amount of time the PM spent communicating with the production crew would be lessened. This, in turn, would allow the production workers more autonomy and reduce their dependence on the boss. Third, the number of production errors was expected to be reduced because all the information related to each job would be consolidated on one form. Fourth, productivity was expected to increase because the production workers would be able to work more continuously without having to ask for additional jobs or obtain incomplete information. Fifth, the number of customer rejects or customer complaints was expected to go down because of the reduced error in the system.

In order to evaluate the new scheduling form, the PM agreed to a period of systematic analysis in which the new form would be introduced, withdrawn, and reintroduced. The introduction of the new form would

affect everyone in production. To evaluate the form it would be necessary to study its impact through the system.

Thus, in this study the new scheduling form was considered a type of independent variable and the effects such as reduced communication time, increased productivity, reduced error, etc. comprised a set of dependent variables. The single case experimental design known as the reversal or ABAB (Hersen & Barlow, 1976) was used to evaluate cause and effect relationships. This approach consists of taking (A) baseline measures, (B) measuring the introduction of the independent variable, (A) measuring the return to baseline conditions and (B) measuring the reintroduction of the independent variable. This reversal is a powerful research design and generally cancels out the threats to internal validity noted by Campbell and Stanley (1966) and Cook and Campbell, (1979). Komaki (1977) and Luthans & Davis (1982) give a detailed analysis of the validity criteria when using reversal designs. A major advantage of this approach compared to traditional experimental designs is that no control group is needed. The four phases of this study took place over four weeks with each phase lasting one week.

The measurement system combined the use of unobtrusive performance measures with organization member self-recording. The dependent variable measures that were tracked during the study were already a part of the firm's existing archival performance measurement system. These could either be objectively verified or verified as trace measures and included:

- unit volume of shirts produced
- screen errors
- shirt botch rate
- customer rejects
- customer complaints

For example, unit volume of shirts produced were verified from production figures that were aggregated each day and each week and screen errors and shirt botch rate were measured in the dump bins that were emptied daily. The method of data analysis used with these measures was simply to graph (frequently over time) the raw numbers or averages to provide a straightforward comparison of substantive differences between the baseline and intervention periods (see Parsonson and Baer, 1978).

In addition to the objective performance measures, self-recording was used to measure the time spent giving and receiving work instructions. Self-recording forms were devised for each department. These forms contained a list of the most usual sources of incorrect or missing information. All members of the production staff were asked to mark the frequency of these errors plus the time and length of delays spent in obtaining needed information.

The two major issues in evaluating self-recording as a measurement approach are reliability and accuracy (Nelson, 1977). "Reliability" refers to the extent that observers agree on the occurrence or non occurrence of a behavior or a set of behaviors. Generally, if the percentage of interobserver agreement is over 80 percent, reliability is considered acceptably high (Hersen and Barlow, 1976). "Accuracy" in self recording refers to the extent to which the person records a real occurrence of the criterion behavior. It is possible to have high interrater reliability without being accurate in recording criterion behaviors. Similarly, it is possible to be accurate without being reliable. In this study, the self-recording by members of the same department provided overlapping reliability checks. The self-recording

by the PM--an independent data point--could be used to assess accuracy by either showing convergence or nonconvergence with the data gathered by members of the work group and vice versa. Steps were also taken to make the recording as accurate and reliable as possible. Large signs were prominently displayed reminding participants to "RECORD!" They also received instructions on how to use the self-recording forms. The forms were collected each day by the researchers and reliability coefficients were calculated for all self-recorded data.

More specifically, the procedures for the study were as follows:

1. Baseline (A). The self-recording system was introduced during an initial period lasting seven working days. Everyone in the three departments were supplied with a clipboard and clocks were placed at each work station. Large signs were placed on doors, walls and desks reminding people to record. The recording forms were collected each day by the researchers. The bins in the various departments were also checked for the number of rejected screens and shirts.
2. Intervention (B). The new form was implemented after the baseline period. Staff members found the directions on the new scheduling form straightforward and easy to follow. The same self-recording procedures that were used during the baseline period were maintained during the seven day intervention phase. Neither real nor implicit goals were set during this period and the data were not displayed nor otherwise fed-back to members of the staff.

3. Return to Baseline (A). The new system was then dropped and the old system of scheduling each order piecemeal was reintroduced for a seven day period. For the first couple of days, the new scheduling forms already in the system were expected to affect this return to baseline conditions. The printing operations at the end of the line were expected to be more affected (i.e. the new forms introduced during the previous intervention period were still having an impact) than "art" or screen preparation that occurred during the earlier stages.
4. Return to Intervention (B). After the end of the seven day baseline, the intervention (the new form) was reintroduced. The self-recording system was maintained along with the artifactual measures on shirt botch rate and screen error.

Results of the Study

The results of this study show that the new scheduling procedure introduced by the PM improved performance on virtually all the measures that were examined. Figure 2 shows the comparisons between the two baseline and the two intervention periods. There was an average increase of 2117 units during the period that the new scheduling system was in place. On only one occasion did volume drop below 1,000 units compared to the baseline periods when shirt volume never exceeded 1,000 units. Overall, the unit volume of shirts processed through the plant increased 26 percent over the baseline period. These figures by far exceed normal variances in the plant. The figures for the baseline

periods duplicated previous average figures. Screen errors due to incorrect or incomplete instructions decreased an average of 30 percent during the time that the new scheduling system was used. The shirt botch rate declined 50 percent during the intervention period compared to baseline. There was no detectable difference in the number of customer rejects and the number of customer complaints.

[Insert Figure 3 About Here]

The effects of the intervention on the time spent giving or receiving work instructions from others are displayed in Figure 3. The self recorded data and reliability coefficients are presented for the PM and the key subordinates in the three departments. As shown, the reliability coefficients exceeded the 80 percent acceptability level. The data show that the introduction of the new form reduced the time spent obtaining needed information during both the intervention periods. The data for the PM clearly indicates a considerable reduction. However, the average time per day spent obtaining work related information is less than the PM had indicated prior to the study. The process of self-recording probably made staff members more aware of the time they were spending on obtaining needed information which may have reduced the total time on these activities. Nevertheless, the self-recording remained the same throughout the study which, therefore, indicates that the improvements were not attributable to the recording. The data indicate that work instructions were more efficiently communicated and that the individuals occupying different positions in the system were less dependent on others for production information.

[Insert Figure 3 About Here]

Discussion and Conclusion

The use of the reversal design in this idiographic study provides powerful evidence for asserting that the improved performance was attributable to the scheduling form introduced by the PM rather than a fortuitous set of concurrent events. The multiple measures and qualitative approaches used in this study also support this conclusion. Six months after this study was conducted, the new scheduling system was still in place and production figures had remained at either comparably high or even higher levels.

We contend that this study does provide some, although admittedly different, evidence of leadership as a causal variable in organizations. While we have perhaps liberally conferred the term "leadership" on the manager's behavior, we have fulfilled the criteria noted earlier for defining leadership as a behavioral construct. Remember it was argued that leadership is not simply an attribution. The leader in this study designed and implemented a technique (the new scheduling form). A cause and effect relationship was demonstrated between the introduction of this "leadership technique" and changes in performance outcomes. These changes were not trivial, but comprise substantial performance improvements in this organization.

This paper contends that leadership need not always take place in direct face to face relations between the leader and subordinates. The leader's ability to structure appropriate performance into the job without constantly being in the presence of the subordinate may be an important, if neglected, aspect of leadership. In this idiographic study, the production manager increased his subordinate's level of self-

control by building the necessary information into their stimulus environment. The new form cued the relevant questions related to each production job and provided the necessary answers. There was less need for face to face contact between the leader and subordinates. Delegation had been satisfactorily accomplished.

The actions taken by the PM were largely precipitated by outside pressures--particularly the increasing number of sales orders coming into the plant. However, this leader was not just a hapless victim of circumstance. He was able to adapt the production system to accommodate these environmental demands. It is suggested that this may be a crucial test of leadership ability.

The approach used in this study represents a significant departure from most leadership research. First, large sized "N's" with questionnaire data gathering were not used. Instead, a single case with intensive examination using qualitative techniques, i.e. observations and interviews, plus unobtrusive measures combined with organization member self-recording were the data gathering technique. Second, this research was not a correlational study nor a traditional control group experiment. Instead, causal relationships were established using a reversal design. Finally, the leadership problem that was studied was a "real problem" in the natural setting, not a fictional problem derived from popular ideas of leadership and defined by the researcher. Importantly, in this idiographic study the leader in the natural setting defined the situation and the research questions not the researchers. Leadership was studied in action as it occurred and not an event reconstructed from organization members' perceptions of leadership behavior as marked on a questionnaire or recalled critical incidents told to a researcher.

An important side point that this study makes is that practitioners do not want to work on the investigator's research problem, they want to work on their own problems. If researchers are prepared to adapt to this reality, excellent opportunities exist for collaborative efforts (Boehm, 1980; Tenopir, 1981). A final point is that the idiographic approach used in this study is not proposed to be a substitute for more nomathetic approaches using control group experimental designs and multivariate statistical analysis. Instead, as we have argued elsewhere (Luthans & Davis, 1982), in order to make progress in difficult, complex areas such as leadership, research should move back and forth in a type of nomological network between idiographic and nomothetic approaches. This networking approach would seem to be much more productive than sole reliance on a nomothetic approach which has been the case to date and may help explain the dismal status of leadership research. The time is ripe for new theoretical and methodological approaches. Hopefully, this paper represents a step in this direction.

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FIGURE 1

PRODUCTION WORK UP SHEET

Date Due: _____
CR # _____
Customer: _____

Number Of Goods: _____ Dozen _____
Screen Colors _____
Dollar Amount: _____

ART

Art Needed? Yes No
Art Approval Required? Yes No When _____
Planned Art Production Date: _____

Actual Production Date: _____

PHOTOGRAPHY

Photography Needed? Yes No Possibility
Planned Photography Production Date: _____
Special Instructions: _____

Actual Production Date: _____

Return photography to: Art for further work.

Screen room for burning screens

SCREENS

Planned Screen Production Date: _____
Screen Numbers: _____
Special Size? Yes No _____
Special Fabric? Yes No _____
Special Emulsion? Yes No _____

Actual Production Date: _____

Front Screens: Yes No
Pocket Print: Yes No Left Right
Full Print: Yes No
Screen Color(s) FA _____
Screen Color(s) FB _____
Screen Color(s) FC _____
Screen Color(s) FD _____

Back Screens: Yes No
Screen Color(s) BA _____
Screen Color(s) BB _____
Screen Color(s) BC _____
Screen Color(s) BD _____

Transfer Screens: Yes No
Screen Color(s) A _____
Screen Color(s) B _____
Screen Color(s) C _____
Screen Color(s) D _____

Special instructions to Screen Dept: _____

PRODUCTION & SHIPPING

Planned Production Date: _____
Back Order: Yes No
Ship Order: UPS, EFD, Parcel Post, Pick Up, _____ Deliver, _____ Truck _____
Planned Shipping Date: _____

Actual Production Date: _____
Actual Shipping Date: _____

FIGURE 2

UNIT VOLUME OF SHIRTS PROCESSED

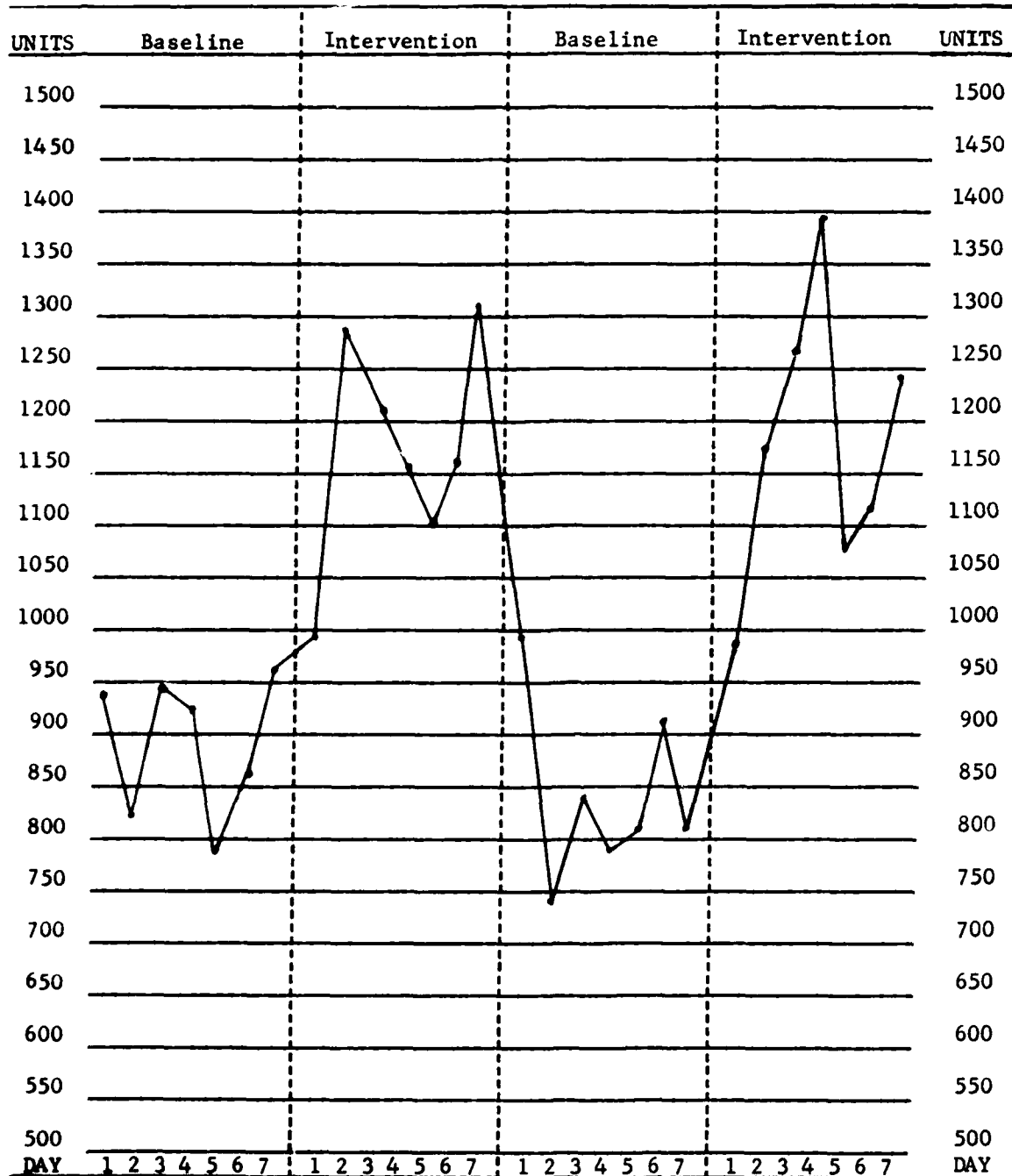
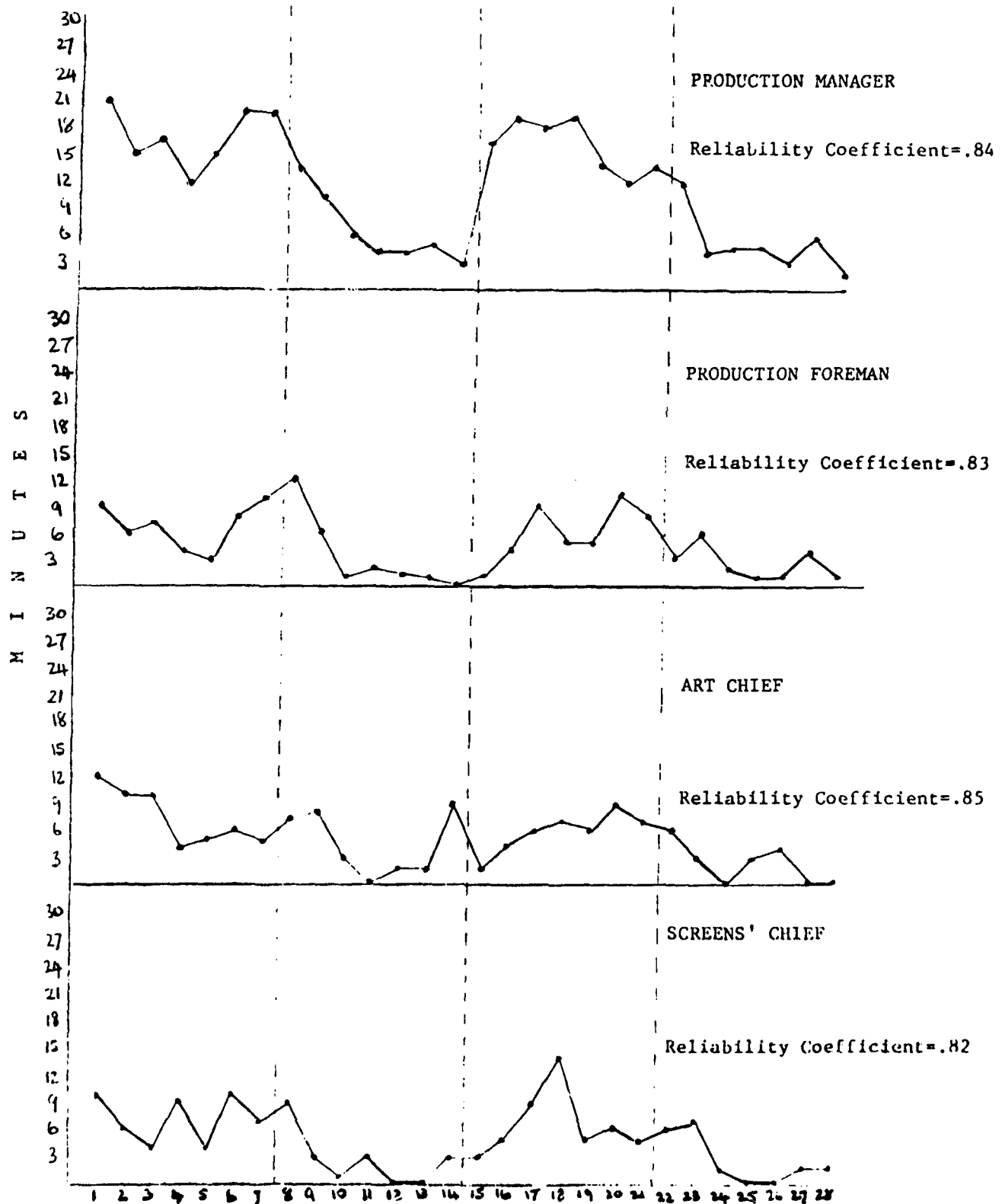


FIGURE 3

TIME SPENT GIVING AND RECEIVING WORK INSTRUCTIONS



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Director
Civilian Personnel Division (OP-14)
Department of the Navy
1803 Arlington Annex
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Plans and Policy Branch (Op-150)
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